

Customer No.: 31561  
Docket No.: 12191-US-PA  
Application No.: 10/709,608

### REMARKS

Applicant has carefully considered the non-final Office Action furnished on June 8, 2007, and the amendments above together with the remarks that follow are presented in a bona fide effort to address all issues raised in the Action and thereby place this case in condition for allowance. Favorable reconsideration and allowance of the application and presently-pending claims 1-18, as currently amended, are courteously requested.

#### Present Status of the Application

The Office Action has rejected claims 1-2, 5, 8 and 14 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 1-6, 8-10, 13 and 15-17 stand rejected under 35 U.S.C. 102(b) as being anticipated by Cha (U.S. Publication No. 2002/0018452 A1; hereinafter "Cha"). Claims 7, 14 and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Brown et al. (U.S. Publication No. 2003/0103515 A1; hereinafter "Brown"). Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Cox et al. (U.S. Patent No. 7,187,863 B2; hereinafter "Cox"). Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Martin et al. (U.S. Patent No. 6,021,129; hereinafter "Martin").

In response thereto, Applicant has revised claims 1, 7, 8 and 14 to provide sufficient antecedent basis for the limitations recited therein and to obviate the 112 rejections. It is

Customer No.: 31561  
Docket No.: 12191-US-PA  
Application No.: 10/709,608

submitted that the proposed amendments to claim 1 render the 112 rejections of claims 2 and 5 moot. Claim 1 has been further amended to more clearly define the claimed subject matter of the present invention and to distinguish the present invention from the prior art of record. Care has been exercised to avoid the introduction of new matter, and adequate descriptive support for the present amendment should be apparent throughout the originally-filed disclosure. Further, Applicant respectfully traverses the prior art rejections addressed to claims 1-18 for at least the reasons set forth below.

**Discussion of Claim Rejections under 35 U.S.C. 102**

*Claims 1-6, 8-10, 13 and 15-17 stand rejected under 35 U.S.C. 102(b) as being anticipated by Cha.*

Independent claim 1, as amended, states,

“A method for transmitting data through a multi-path bus in a transmission system having a plurality of data transmission channels, comprising:  
a data block being divided into a plurality of data segments and being transmitted via said data transmission channels by a transmitting end of said transmission system, wherein the transmitting end comprises a transmitting end arbitor coupled to a plurality of transmitting end transceivers; and  
said data segments being received and assembled to said data block at a

Customer No.: 31561  
Docket No.: 12191-US-PA  
Application No.: 10/709,608

receiving end of said transmission system through said data transmission channels, wherein the receiving end comprises a receiving end arbitor coupled to a plurality of receiving end transceivers." (Emphasis added)

Independent claim 1 is allowable for at least the reason that Cha does not disclose, teach, or suggest the features that are highlighted in claim 1 above. More specifically, as indicated in FIG. 3 and the description in paragraph [0030] of the present invention, the transmitting end arbitor 311 incorporated by the transmitting end 310 "is coupled to the transmitting end transceivers 312, 313, 314 and 315 so that the ongoing data block is divided into data segments and are transmitted through the data transmission channels..." Likewise, in paragraph [0034], the receiving end arbitor 321 incorporated by the receiving end "is coupled to the receiving end transceivers 322, 323, 324 and 325 to receive the data segments through the data transmission channels..." With the communication between the transmitting end arbitor and the receiving end arbitor, the size and the quantity of the data segments are determined. However, Cha, the primary cited reference, neither teaches nor suggests the disposition of the transmitting end arbitor and the receiving end arbitor as provided in the Applicant's invention. The claim 1 of the present invention is novel and patentable.

For at least the same reason, Cha fails to disclose the dispositions of the transmitting end arbitor as claimed in Applicant's independent claim 13 and of the receiving end arbitor as claimed in Applicant's independent claim 17, and thus claims 13 and 17 are allowable.

Customer No.: 31561  
Docket No.: 12191-US-PA  
Application No.: 10/709,608

Consequently, Cha does not anticipate Applicant's independent claims 1, 13 and 17, and the rejections thereof should be withdrawn.

Because independent claims 1 and 13 are allowable over the prior art of record, their dependent claims 2-10 and 15-16 are allowable as a matter of law, for at least the reason that the dependent claims 2-10 and 15-16 contain all features/elements/steps of their respective independent claims 1 and 13. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

**Discussion of Claim Rejections under 35 U.S.C. 103**

*Claims 7, 14 and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Brown. Claim 11 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Cox. Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Cha in view of Martin.*

It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., *In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871,

Dependent claim 7, as originally filed, reads,

"The system of claim 6, wherein a size and a quantity of said data segments

Customer No.: 31561  
Docket No.: 12191-US-PA  
Application No.: 10/709,608

are determined upon communication between said transmitting end arbitor and said receiving end arbitor through one of said data transmission channels before said data block is transmitted."

Even conceding the Cha fails to disclose the size and the quantity of the data segments are determined before transmission, the Office has still alleged that Brown teaches the missing feature. Nevertheless, Applicant respectfully submits the combination of Cha in view of Brown fails to establish a *prima facie* case of obviousness, for the combination does not disclose the size and the quantity of the data segments to be transmitted are determined through one of said data transmission channels. With reference to FIG. 1 of Brown, the processor 11 therein does not determine the size and the quantity of the data to be transmitted via the data transmission channels, so Applicant's dependent claim 7 is non-obvious and patentable under 35 U.S.C. 103.

On the other hand, Applicant respectfully submits the combination of Cha in view of Brown, Cox, Martin, or any other cited references, fails to establish a *prima facie* case of obviousness, for the combination does not disclose at least the features advanced hereinbefore as highlighted in claim 1 above. Accordingly, claims 7, 11 and 12 depending upon the allowable independent claim 1 are not rendered obvious, and hence the rejections thereof should be withdrawn.